

Appl. No. 09/628,669
Amdt. Dated December 7, 2004
Reply to Office Action of October 12, 2004

REMARKS

Reconsideration of the above-mentioned reissue patent application is hereby requested in view of the following remarks responsive to the new grounds of rejection set forth by the Examiner.

Applicant acknowledges the Office Action mailed on October 12, 2004. Applicant appreciates the thorough examination by the Examiner and the indication of allowable subject matter. Applicant requests further reconsideration of the above-mentioned application in view of the following remarks.

CURRENT DISPOSITION OF THE CLAIMS

The Examiner has allowed claims 1-18, 23-26, 38-42 and 47-54. Claims 19-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Roberts (U.S. Patent 3,760,335) in view of Henschen (U.S. Patent 3,663,930), Ammon (U.S. Patent 3,868,162), Chau (U.S. Patent 5,190,480) and Martens (U.S. Patent 4,582,386). Specifically, in rejecting claims 19-22, the Examiner asserts:

Roberts discloses mateable connectors comprising a first and a second electrical connectors having mateable contacts and at least one first power contacts 58' mateable with at least one second power contacts 50; the first power contacts having opposed contact fingers having resiliently deflectable bowed portions which extend in a cantilevered manner, and the second power contact having opposed contact surfaces; wherein the opposed contact fingers of the first power contacts are received between the opposed contact surfaces. It is noted that the

first power contacts of Roberts, the fingers are not extending from a base body and Roberts lacks to disclose separate signal contacts from the power contacts and in which the power contacts are larger or more massive than the signal contacts as substantially set forth by applicant's invention. Henschen et al. shows contact contact terminal structure 2 having resilient fingers with deflectable bowed portions (see figure 8). Ammon show that it is known to provide resiliently contact fingers 35 extending from base body portions 31 (see figure 2). Chau et al. and Martens both disclose the use of signal contacts in combination with power contacts in their connector housings and that their power contact are generally larger or more massive than their signal contacts. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the first power contacts of Roberts with fingers with deflectable bowed portions extending from a base body portion in view of Henschen et al. and Ammon, and to provide signal contacts in combination with at least one set of power contacts for the connector of Roberts in which the power contacts are larger or more massive than the signal contacts in view of the teachings Chau et al. and Martens. The use of contact structures having resilient fingers extending from a single base body portion is old and well known, and the use of larger power contacts would increase the current carrying capacity as is well known in the art (see Chau et al., column 4, lines 10-18).

Applicant respectfully disagrees with this characterization of the prior art.

DISCLOSURE OF THE REFERENCES

For discussion purposes, the following summarizes the teachings of the references relied upon by the Examiner in rejecting claims 19-22.

Roberts

The Roberts reference teaches a multi-contact connector comprising an insulative body with a plurality of contact terminals therein. See Abstract. The rearward ends of the terminals include slotted contacts means configured to form an electrical contact between the terminals and the wires. See Abstract. The arrangement of the contact terminals allows a plurality of wires to be connected to individual terminals in a single operation. See Abstract, and column 2, lines 8-14. The embodiment of the contact terminal that achieves this objective comprises a rearward wire connection section. See column 4, lines 23-25. This rearward connecting section is U-shape with an opening. See column 4, lines 26-28. Mechanical and electrical connection of the wire to the terminal is achieved by forcing the wire into the slot. See column 4, lines 39-41.

Henschen

The Henschen reference discloses a disengageable electrical connector comprising contact terminals. See Abstract. The female terminal includes a channel for receiving a male terminal with spring contacts adapted to move between the side walls of the channel in the female terminal. See Abstract. The contact terminals include a front and rear U-shaped sections connected by semi-elliptical springs. See column 1, lines 69-71. The front U-shaped section includes web connecting two side walls. See column 1, lines 71-75.

Ammon

The Ammon reference teaches an electrical connector including contact terminals inserted into a substrate and covered by an insulative housing. See column 1, lines 55-57. The contact terminals comprise a connector portion and a neck section separated by a shoulder portion. See column 3, lines 46-48. The connector portion of the terminal is curved into a bowed configuration. See column 3, lines 53-55.

Martens

The Martens reference teaches a connector with one or more rows of contacts. See Abstract. The connector has enlarged contacts or power contacts on each end to handle large currents. See Abstract.

Chau

The Chau reference teaches an electrical connector assembly including an insulative housing with a slot formed in the housing. See Abstract. The housing defines first signal passages and second power passages. See Abstract. The electrical connector also includes a plurality of signal and power conductive members. See Abstract.

DISCUSSION OF THE REJECTION

In rejecting claims 19-22 under 35 U.S.C. § 103, the Examiner combines various aspects of the above five references. The Examiner bases the obviousness rejection on

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the assumption that in view of the teachings of Henschen and Ammon it would have been obvious to one of ordinary skill in the art to construct the first power contacts of Roberts with fingers including deflectable bowed portions extending from a base body portion. In addition, the Examiner believes it would have been obvious to provide signal contacts in combination with at least one set of power contacts for the connector of Roberts in view of the teachings Chau et al. and Martens. Applicant respectfully disagrees.

**THE PRIOR ART DOES NOT PROVIDE MOTIVATION FOR THE
COMBINATION SUGGESTED BY THE EXAMINER**

An Examiner must establish three basic criteria in order to make a *prima facie* case of obviousness. First, there must be some suggestion or motivation, to modify the reference to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art references must suggest all of the claim limitations. See MPEP, § 2143.

The teaching or suggestion to make the claimed combinations must be found in the prior art, not in the disclosure of the applicant. See In re Vaeck, 20 USPQ 2d 1438 (Fed. Cir. 1991). Moreover, "[I]n determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution,

combination, or other modification." *In re Linter*, 173 U.S.P.Q. 560, 562 (CCPA 1972). Furthermore, the fact that references can be combined or modified does not necessarily render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See MPEP, § 2143.01. In *In re Mills*, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990), the Court considered claims directed toward an apparatus for producing an aerated cementitious composition by drawing air into the composition. The prior art reference taught that the feed means could run at variable speeds but did not necessarily require the feed means to run at the claimed speed. The Court explained that although the prior art device could run as claimed, "there must be a suggestion or motivation in the reference to do so." See *Mills*, 16 U.S.P.Q.2d at 1432.

In the present case, the Examiner has yet to provide any suggestion or motivation set forth in the references to combine the references in the manner suggested by the Examiner. In rejecting claims 19-22, the Examiner first sets forth his interpretation of the disclosure of the references, and then states "it would have been obvious to one of ordinary skill in the art at time the invention was made to construct the first power contacts of Roberts with fingers with deflectable bowed portions extending from a base body portion in view of Henschen et al. and Ammon, and to provide signal contacts in combination with at least one set of power contacts for the connector of Roberts in which the power contacts are larger or more massive than the signal contacts in view of the teachings Chau et al. and Martens." Applicant respectfully asserts that this does not

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demonstrate a proper motivation to combine the references. Rather, the Examiner appears to improperly assert that the prior art must render the claimed invention obvious, since the prior art, allegedly, discloses all of the features of the claimed invention and would have been within the ordinary skill in the art. This fails to demonstrate motivation for combining any of the references in the manner suggested by the Examiner.

A statement that modification of the prior art resulting in the claimed invention would have been within the ordinary skill in the art is insufficient. See MPEP, § 2143.01. Just because "the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references." See *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). For example, in *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000), the Court reversed an obviousness rejection involving simple technology because there was no finding as to the principle or specific understanding within the knowledge of the artisan that would have motivated the artisan to make the claimed invention." Thus, it is insufficient to state that it would have been obvious to one of ordinary skill in the art to make the claimed invention upon the belief that the prior art shows certain features of the invention as being known. Accordingly, the obviousness rejection is improper, unless the Examiner can provide some teaching or motivation for combining the references in the manner suggested.

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**THE REFERENCES TEACH AWAY FROM THE SUGGESTED
COMBINATION**

In combining Roberts with Ammon and Henschen in order to form a base body portion from which the contact fingers extend, the Examiner overlooks another tenant of patent law. When making an obviousness type combination, "[I]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." See MPEP, § 2143.02. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. See MPEP, § 2143.02. For example, in *In re Ratti*, 123 U.S.P.Q. 349 (CCPA 1959), claims were directed to a seal comprising a bore engaging portion with resilient fingers inserted into the sealing member. In a rejection based upon a combination of references, the primary reference disclosed a seal with the bore engaging portion reinforced by a cylindrical sheet metal casing. The Court reversed the rejection holding the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate." See *Ratti*, 123 U.S.P.Q. at 352.

With respect to the present application, Roberts, the primary reference relied upon by the Examiner, describes the disclosed invention as being directed to:

the achievement of a pre-loaded electrical connector which does not require soldered connections between the contact terminals in the connector and the wires extending to the connector. The invention is further directed to the achievement of a connector which can be produced, if desired, with a large number of contact terminals on closely spaced centers and which can be applied to the end of a plurality of wires in a minimum of time, and without the requirement of a high degree of skill on the part of the technician.

See Roberts, column 2, lines 4-14. In order to accomplish this, Roberts includes, as shown in Figure 4, an electrical connector comprising pre-loaded electrical contact terminals 46 including a rearward wire connecting section 48. See Roberts, column 4, lines 23-25. Roberts further explains that "the wire connecting section 48 is generally U-shaped and has an opening 50 extending into the bight of the U. This opening communicates with slots 51 in each leg of the U which have a width somewhat less than the diameter of the conducting core of a wire to which the terminal is to be connected." See Roberts, column 4, lines 26-32. The electrical connection of wire to the terminal is effected by forcing the wire into the slots through the opening. See Roberts, column 4, lines 41-44.

Responsive to a previous office action, Applicant amended claim 19 to require that the connectors include contact fingers extending from a **base** body portion. The

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Examiner now rejects claims 19-22 based, in part, on the combination of Roberts and Henschen and Ammon. The Examiner relies upon Henschen to teach "contact terminal structure 2 having resilient fingers with deflectable bowed portions." Moreover, the Examiner asserts "Ammon shown that it is known to provide resiliently contact fingers 35 extending from base body portions." The Examiner then asserts it would have been obvious to replace the contacts of Roberts with those of Martens and Ammon. Applicant respectfully disagrees.

As explained above, the connection of the contacts in Roberts constitute an important feature of the disclosed invention. In making the argument that it would be obvious to replace the contacts of Roberts with connectors taught by Martens and Ammon, the Examiner ignores the teachings of Roberts and the importance placed upon the contacts taught therein.

As set forth in the MPEP, however, "[I]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." See MPEP, § 2143.02. Because the combination suggested by the Examiner results in Roberts having an arrangement different from its intended purpose, the combination set forth by the Examiner is improper, as more fully described below.

Combining Roberts with the teachings of Martens and Ammon, as suggested by the Examiner, would result in a

modification to Roberts that renders Roberts unsatisfactory for its intended purpose, in at least two ways. First, Roberts teaches that its intention is to make a connector which requires little skill in terminating the wires thereto. The Examiner's proposed changes to Roberts would not succeed in connecting the contacts to wires to achieve the desired results of the invention taught by Roberts. The substitution of the teaching of Ammon regarding contact fingers extending away from a base body portion in Roberts would result in Roberts no longer utilizing the slot connection disclosed therein. Thus, Roberts would no longer engage the wires in the manner originally taught.

Secondly, Roberts teaches that it is a requirement and intention to mass terminate a large number of wires. Thus, the Examiner's addition to Roberts of a base body portion would reduce the number of contacts available for signals, **by one-half**. This is totally inconsistent with, and contrary to, Robert's teaching. For these two reasons, the changes proposed by the Examiner are inconsistent with Roberts' design intentions and cannot be an obvious combination.

Finally, in the rejection, and particularly the last sentence of paragraph 2, the Examiner summarizes that "The use of contact structures having resilient fingers extending from a single base body portion is old and well known...". However, the Examiner is required to use two references to make this statement, Henschen and Ammon. The Examiner has yet to find a reference that shows a contact structure as shown and claimed by Applicants, and the overall combination

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proposed by the Examiner is simply not combinable as
discussed above.

CONCLUSION

Applicant respectfully requests the rejection of claims 19-22 be withdrawn. As explained above, the Examiner has not established a teaching or motivation in the prior art to combine the five references as suggested. Accordingly, the Examiner has failed to make out a *prima facie* case of obviousness.

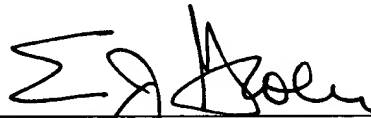
Moreover, the teachings of the references actually teach away from the combination suggested by the Examiner. Combining the references in the manner suggested by the Examiner renders the primary reference, Roberts, unsatisfactory for its intended purpose, i.e. to provide an electrical connector with contact terminals to which can be applied to a plurality of wires in a minimum time, with little effort. Thus, Applicant believes the combination set forth by the Examiner is improper.

For the reasons set forth in detail above, Applicant believes claims 19-22 are allowable over the cited prior art. Applicant requests the Examiner please consider the above arguments. If the Examiner disagrees with the allowablity of claims 19-22, Applicant requests that the Examiner set forth a *prima facie* case of obviousness, including motivation or teaching that suggest combining the references in the manner set forth by the Examiner. In addition, Applicant also requests the Examiner please address the combination arguments set forth above.

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If necessary to affect a timely response, please consider this paper a request for an extension of time, and charge any shortages in fees, or apply any overpayment credits, to Baker & Daniels' Deposit Account No. 02-0387 (72249.20). However, please do not include the payment of issue fees.

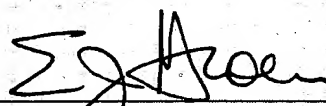
Respectfully submitted,



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